

WHAT IS CLAIMED IS:

1. A computer system comprising:  
at least one server module;  
a midplane associated with the server modules, the  
5 midplane operable to receive the server module and to  
provide a unique address for each server module based on  
the location of the server modules on the midplane;  
at least one address module associated with the  
server modules, the address module operable to obtain the  
10 unique address from the midplane for each server module  
and to calculate a start-up time for each server module  
based on the unique address for each server module; and  
at least one power supply associated with the  
midplane, the power supply operable to sequence power to  
15 the server modules based on the start-up times for the  
server modules.
2. The system of Claim 1 wherein the server module  
comprises a blade server.
- 20 3. The system of Claim 1 wherein the server module  
comprises a brick server.
4. The system of Claim 1 wherein the midplane  
25 comprises a circuit board including one or more  
connectors coupled to the midplane and one or more  
resistors coupled to the midplane.

5. The system of Claim 4 wherein the connectors are operable to provide an interface between the server modules and the midplane.

6. The system of Claim 4 wherein each connector is operable to interface with one server module.

7. The system of Claim 4 wherein the midplane provides a unique address to each server module through resistor strapping the one or more resistors.

8. The system of Claim 1 wherein the midplane is further operable to provide an interface between the server modules and the power supply.

9. The system of Claim 1 wherein the power supply is operable to provide power to each server module upon expiration of the start-up time for each server module.

10. The system of claim 1 further comprising a management controller associated with the midplane, the management controller operable to provide sequence redundancy by sequencing power to the server modules if the midplane experiences a failure.

11. The system of Claim 1 wherein each address module includes a timer, the address module further operable to set the timer with the start-up time and the timer operable to count down from the start-up time.

12. The system of Claim 1 further comprising one or more switches associated with the server modules and the address modules, the switches operable to accept a command from the address modules to switch between an on position and an off position.

13. The system of Claim 12 where at the expiration of the start-up time the address module switches the switch to the on position allowing an associated server module to receive power from the power supply.

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14. A method for autonomous power sequencing in a computer system, the method comprising:

receiving one or more server modules;

providing a unique address for each server module

5 based on the location of the server modules on a midplane;

obtaining the unique address for each server module from the midplane;

calculating a start-up time for each server module

10 based on the unique addresses of the server modules; and automatically sequencing power to the server modules based on the start-up times for the server modules.

15 15. The method of Claim 14 wherein the server module comprises a blade server.

16. The method of Claim 14 wherein the server module comprises a brick server.

20 17. The method of Claim 14 wherein calculating the start-up time comprises:

obtaining a multiplication factor for the server modules; and

25 calculating the start-up time using the multiplication factor.

18. The method of Claim 14 further comprising:  
setting a timer with the start-up time;  
counting down on the timer until the start-up time  
expires; and

5 on the expiration of the start-up time, switching a  
switch to an on position that allows the server module to  
receive power from a power supply.

10 19. The method of Claim 14 wherein receiving the  
server modules comprises inserting the server modules  
into at least one connector coupled to the midplane.

15 20. The method of Claim 14 wherein providing a  
unique address for each server module comprises strapping  
one or more resistors to the midplane whereby each  
connector provides a unique address for the server module  
associated with the connector.

20 21. The method of Claim 14 wherein automatically  
sequencing power to the server modules comprises  
providing power to the server modules one server module  
at a time.

25 22. The method of Claim 14 wherein automatically  
sequencing power to the server modules comprises  
providing power to each server module upon the expiration  
of the start-up time for each server module.

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23. A computer system comprising:
- one or more server modules operable to process data;
  - one or more midplanes associated with the server modules, the midplanes including a plurality of
  - 5 connectors, each connector operable to interface with one server module and provide a unique address for each server module based on which connectors the server modules interface with;
  - one or more address modules associated with the
  - 10 server modules, the address modules operable to obtain the unique address from the connectors for each server module and to calculate a start-up time for each server module based on the unique address for each server module;
  - 15 one or more power supplies associated with the midplanes, the power supplies operable to provide power to the server modules in a sequence determined by the start-up times for the server modules; and
  - one or more chassis operable to house the server
  - 20 modules, the midplane, and the power supply.

24. The system of 23 further comprising one or more management controllers associated with the midplanes, the management controllers operable to provide sequence
- 25 redundancy when one or more of the midplanes experiences a failure.

25. The system of Claim 23 further comprising one or more cabinets housing one or more of the chassis.